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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,554	04/09/2004	Yuuki Watanabe	09792909-5863	1305

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SONNENSCHN NATH & ROSENTHAL LLP
P.O. BOX 061080
WACKER DRIVE STATION, SEARS TOWER
CHICAGO, IL 60606-1080

EXAMINER

CHIN, CHRISTOPHER L

ART UNIT	PAPER NUMBER
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1641

MAIL DATE	DELIVERY MODE
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10/31/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/821,554

Applicant(s)

WATANABE, YUUKI

Examiner

Christopher L. Chin

Art Unit

1641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 17-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification, as originally filed, is not enabled for the emotion sensor device and emotion sensing method of claims 17-18. The specification fails to teach any specific "secretion products" that are directly related to specific changes in specific emotions. The claimed method and sensor device require detection of changes in a detecting portion caused by coupling of secretion products to the detecting portion. Since the specification fails to identify the "secretion products" and to which emotions are related to the "secreted products", the claimed sensor and method cannot be enabled for the detection of changes in emotion.

2. Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is vague because the claim fails to recite any components for the claimed sensor device. While the preamble of the claim recites a device, the body of the claim fails to recite the components that comprise the device. At the best, the claimed

device has a detecting portion and nothing else. While the preamble characterizes the claimed device as being a sensor, the body of the claim fails to recite any sort of component that can "sense" an interaction between the detecting portion and target.

Claims 5-10 are vague because they fail to recite the necessary components in the claimed sensor required to perform the various measurements that are recited.

Claims 12, 13, 15, and 17 suffer from the same deficiencies as claim 1.

Claim 14 is vague and indefinite. The preamble is not consistent with the body of the claim because the body of the claim is directed to extracting information about a biological substance from coupling with the detecting portion while the preamble is directed to a method for sensing a biological substance. The claim is also not clear as to what changes in the "nature" of the detecting portion are being measured.

Claims 16 and 18 suffer from the same deficiencies as claim 14.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5 and 11-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Kamensky (US Patent 4,487,839) for the reasons of record.

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In response to this rejection, Applicants argue that Kamentsky does not anticipate every claimed limitation, specifically the extraction of plural pieces of information. Applicants assert that the instant invention includes temporal detection, many types of interactions, and many more spatial embodiments.

Applicant's arguments have been considered but are not convincing. It should be noted that the various types of detection that Applicants are arguing, namely "temporal detection, many types of interactions, and many more spatial embodiments" are not recited in the claims, so any arguments to such limitations will not be considered. The device in Kamentsky is fully capable of determining the presence, absence, or quantity of analyte present and thus satisfies the claimed limitation of extracting plural pieces of information.

5. Claims 1 and 9-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Willner et al (US Patent 6,630,309 B2).

Willner et al was discussed in the previous office action.

In view of the 112 2nd paragraph rejection of claims 1 and 9-10 above, the sensor recited in claims 1 and 9-10 appear to only comprise a detecting portion (claim 1) and an oscillating circuit with frequency measure device (claim 10) to measure weight changes. Such a sensor is disclosed in Willner et al.

6. Claims 1 and 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Kornguth et al (US Patent 5,629,213).

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Kornguth et al was discussed in the previous office action.

In view of the 112 2nd paragraph rejection of claims 1 and 6-8 above, the sensor recited in claims 1 and 6-8 appear to only comprise a detecting portion (claim 1) and a means for measuring surface plasmon resonance (SPR) to measure changes in dielectric constants (claims 6-8). The SPR sensor of Kornguth et al contains the necessary components.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher L. Chin whose telephone number is (571) 272-0815. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on (571) 272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Christopher L. Chin
Primary Examiner
Art Unit 1641

10/26/07